



1956

ANNUAL REPORT

of the

Medical Officer of Health

of the

Urban Sanitary Authority

of

EAST DEREHAM

Norfolk





STAFF

Medical Officer of Health

A.B. GUILD, M.B., Ch.B., D.P.H., D.I.H.

Surveyor and Public Health Inspector C.McD. O'DONNELL, M.S.I.A., C.R.S.I.B.

Waterworks Superintendent:

R.R. TYE

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EAST DEREHAM URBAN DISTRICT

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR 1956.

Mr. Chairman, Mrs. Aldiss and Gentlemen,

I have the honour to submit my Annual Report for the year 1956.

The estimated mid-year population for 1956 was 6,710, an increase of 60 over that of the preceding year.

VITAL STATISTICS.

109 live births of which 8 were illegitimate, were registered during the year, and there were 61 deaths from all causes.

The birth rate (16.24) was slightly lower than last year (16.39) and the England and Wales rate was 15.7.

There were 3 still births giving a still birth rate of 0.45 as against 0.15 last year, while the England and Wales rate was 0.35

The births comparability factor, the ratio of the national to the local fertility index, remained at 1.01.

The number of deaths showed a further decrease, 61 as against 65, and this gives a death rate of 9.09, a decrease of 0.69 and the lowest ever recorded. The death rate for England and Wales was 11.73.

The deaths comparability factor was 0.86.

There were 3 deaths of infants under 1 year of age (2 under 4 weeks of age), giving an infant mortality rate of 27.52 compared with the England and Wales rate of 23.9. The causes of death were (1) pulmonary atelectasis (2) meningitis and hydrocephalus (3) prematurity.

Infectious diseases were responsible for 4 deaths - influenza 2 and pneumonia 2.

The smaller number of deaths can be attributed entirely to the marked fall in deaths due to cancer - only 8 as against 16 last year.

INFECTIOUS DISEASES

72 cases of infectious disease were notified during the year.

Scarlet Fever. The number of cases notified - 38 - seems to be the highest ever recorded. The majority of the cases (24) occurred in the three months, April, May and June, and quite a large percentage of the children attended Dereham Secondary Modern (Girls) School, or had some connection with this school. Swabbing of selected classes, teaching and canteen staff, did not yield any important information.

All were mild in character and consequently effective isolation from the other members of the family could not be maintained for long.

Measles. Only I case was notified and this will inevitably result in a large outbreak in the future owing to the accumulation of susceptible children.

Dysentery. 7 cases were notified and two families were involved mainly. The cases were not severe and the problem here is that the carrier condition, after recovery, may be prolonged. As yet no drug is known which can effectively deal with this condition.

There should be no complacency in dealing with this disease, the mildness of which may lead to the neglect of elementary hygicnic precautions.

Food Poisoning. Three cases were notified during the year.

The first case was due to Salmonella typhimurium infection, the origin of which was not traced.

The second case appeared to be due to staphylococcus aureus. The patient had chicken paste - "Far North" variety - on bread for her tea and shortly after consumption the typical symptoms developed. Her baby also had a little of the paste and was out of sorts the following day. The husband had no paste and remained perfectly well. The remnants of the jar were sent to the laboratory and a profuse growth of staphylococcus aureus was isolated. Two jars of the same consignment - all that remained in the shop - gave no bacterial browth on examination.

The third case was a typical mussel poisoning, which appears to be quite rare although large numbers of oysters are consumed in this area.

The incidence of the notifiable diseases is given in the following tables, the first giving the total notifications with the corresponding figures for the previous three years, and the second table giving the age distribution.

Notification rate per 1,000 population.

T. *	7050	3 0 == ==	7 0 4		T	
Disease	1956	1955	1954	1953	E.D.U.D.C.	E & W.
Scarlet fover	38	2	2	11	5.66	0.73
Measles	1	2	119	40	0.15	3.55
Whooping cough	4	61	36	49	0.4	2.00
Pneumonia	18	1	5	2	2.68	0.57
Erysipolas	P=0	pros	}	1		
Cerebro-spinal fever	acud	june	pert	1		
Infectious hepatitis	₩	west	-	11		
Dysontery	7	11	4	-	1.04	1.08

Puerperal pyrexia	1		2		3	***					•		
Poliomyelitis			Sumb		1	2							
Food Poisoning	3		1		3	Trace							
Total	72	konge til grafiget først er i skalend av de grafiget første skalende fra skalende f		1.7	23	117	do spalabas						
			Ag	e Gr	oups			0.0					
Disease	0	I &	2	<u> </u>	4	5 ***	TO STATE OF THE PROPERTY OF TH	15-	25-	35 pm	45	55=	65 -
Scarlet Fever	arreg	1	prog	1	1	14	15	2	3	1	Peak	g-rep	
Measles	pany	Strong	pening	6=3	freq	1	g=6	Ump	Street	2004	-	_	bases
Whooping Cough	1	nen	1	1	gering	1	prote	ghost	-	ana	gone	Ph. di	
Pneumonia	group	perm	seed	1	perso	1	pros	polity	1	1	7	4	3
Dysentery	electe	(mag)	1	p-4	1	3	NA	1	1	comp	949	Boll	Berry
Puerperal pyrexia		200	-	8019	m	desta	gca .	gavag	1	pers	prod	-	996
Food Poisoning	SHAM!	good	944	29440	***	tresj	von	1	1	gene	1	and	900
Total	Section 1974 (1974 of 1974) the section of the sect	1	2	3	2	20	15	\$1.110.00.00.00.00.00.00.00.00.00.00.00.0	oma signi et sidation galami daga kerugi albumi dan del	2	a Transition of the Committee of the Com	eroneuroneurouronnon romennon vaus sons L	u skuttakohirininin ele erikannin - proka

Tuberculosis

During the year 7 cases were added to the register, of whom 2 were inward transfers and 1 was a restoration. The comparative figures for the previous three years are :-

1955 - 6

1954 - 5 1953 - 4

The distribution of these 7 cases by ago and sex is as under :-

	Respirato	ory	Non-respiratory		
Age Period	M .	F.	\mathbb{M} .	F.	
26 - 35	1 (a)	1 (a)	ārmā	\$m0	
36 - 45	0-1-100 10-1-100	pros	-	Bres.	
46 - 55	purg	ente	print	1	
56 - 65	1+IR	1	PH	-	
	The state of the s		artenet (a. 1. sen i set i set tanta i skar i set tara i Mindori i ara sprijas por mil Mundori pi ara skar i me upaga pet managa i Min	na supershambe are stall seman a stancing life su non lad's stal lime, sou ni andio	
		, ,			
	3 (a) + IR	2 (a)	844	1	
		Mine (print , m) England Marcolat (1 1 1 1 1 1 1 1 1	500 February Sp. (3) January 20 February 20 February 1 (20 Februar	to 1 1000 + Right to sent a set 5 Mb yer 10000\$ Libror 15 De not not 10 ex Hispir at 1 Hi 00 100-	

(a) denotes one inward transfer: R - restoration.

The numbers remaining on the register were :

	Respiratory			Non-	-respi	ratory	Grand Total	
	M	F	Total	M	F	Total		
31.12.55	14	15	29	2	7	9	38	
31.12.56	18	16	34	2	7	9	43	

No deaths were due to tuberculosis.

The statistics for the County of Norfolk per 1,000 of the population in 1956 are given below with the data for East Dereham in brackets for purposes of comparison.

Formal Notifications

•	Respiratory	Case Rate	Non-respiratory	Case Rate
6.	149 (3)	0.39 (0.45)	39 (1)	0.10 (0.15)
	Mortality figures	for the same	period were :	
	Rospiratory	Case Rate	Non-respiratory	Case Rate
	21 (0)	0.05 (0)	3 (0)	0.01 (0)

B.C.G. Vaccination.

Tuberculin testing and B.C.G. vaccination were carried out again on children aged 14 years and over at the four largest schools in the district. The acceptances were 52%

The results are tabulated below :-

School.	Rofusals	Acceptance Primary Tubercu			Tuberculin Test fter vaccination
Dereham Girls: High School	58	10 (10 screened later)	23	23	18
Dereham M.S.Girls'	59	18 (12 screened later)	26	25	25
Dereham M.S. Boys'	18	25 (24 screened later)	32	31	30
LITCHAM Arca School	. 9	6 (5 screened later).	18	18	18

Dr. G.F. Barran, Chest Physician for the area, very kindly screened those children whose primary tuberculin test was positive. In all cases the X-ray appearance was within normal limits.

Cancer of the Lung.

For the second year in succession no deaths were due to malignant disease of the lung or bronchus.

That there is a strong connection between cigarette smoking and cancer of the lung can hardly be doubted. Early diagnosis is not easy and once the diagnosis has been established the success of the treatment is problematical.

In the present state of our knowledge the only sound advice to be given is to cut out smoking entirely. I can see no way of convincing the average boy or girl leaving school that what they do now is likely to cause serious trouble 30, 40 or more years later.

Causes of Death.

The causes of death are given in the following table supplied by the Registrar General:-

	Male	Female	Total
Malignant neoplasm, stomach	0~0	1.	1
Malignant neoplasm, breast	p=0	2	2
Other malignant and lymphatic neoplasms	4	1	5
Diabetes	1	1	2
Vascular lessions of nervous system	2	4	6
Coronary disease, angina	. 5	2	7
Hypertension with heart disease	· (mag	1	1
Othor heart disease	11	6	17
Influenza	Broom	2	2
Pneumonia	1	1	2
Bronchitis	2	ent	2
Naphritis and nephrosis	prote	1	1
Congenital malformations		1.	1
Other defined and ill defined diseases	7	2	9
All other accidents	1	2	3
	34	27	61

GENERAL STATISTICS.

Arca (in acros)	5,313
Population	
(estimated mid-1956)	6,710
Rateable Value	£67,283
Estimated product of a	
ponny rato	£250.

MEDICAL STATISTICS.

Extracts from vital statistics for the year relating to the net births and deaths after correction for inward and outward transfers as furnished by the Registrar General :-

I di liibilod by bilo it		Females		East De	ereham 1955	England & Wales 1956
LIVE BIRTHS Legitimate	53	48	101			
Illegitimate	5	3	8			
	58	51	109			
Birth rate por 1,00 estimated resident				16.24	16.39	15.7
STILL BIRTHS						
Legitimate	2	1	3			
Illegitimate	2		3			
Still birth rate pestimated resident			.e	0.45	0.15	0.35
DEATHS (All Ages)						
	34	27	61			
Crude death rate peestimated resident			.⊖	9.09	9.78	11.73
INFANT DEATHS (Und	er I yo	ar)				
Legitimate	3	gres	3			
Illegitimate	4177666678887115766667115364786666666691151011111646	audipolin (ge 3 nel 164 cin), is is appealed 1766 - remajor sat regio - y cold estima	**************************************			
Tank and British To		_	O			
Infant Mortality Range 1,000 live births	ate per			27.52	27.52	23.9

DIPHTHERIA IMMUNISATION SCHEME

The following immunisations were carried out during the year by general practitioners and the Assistant County Medical Officer.

	Under 1.	1.	2	3	4	5-9	10-14	Total
Primary	58	20	-	prof	Peny	16	3	97
Reinforcing	gang	pros.	trest	pedg	3	7 9	44	126
								223

In the 11 years 1946-1956, the number of births was 1,209 and in the same period 1137 children received complete primary injections while 1438 reinforcing injections were given. No children were immunised against whooping cough alone.

VACCINATION.

The number of vaccinations was slightly higher than last year. The vaccination rate under 1 year of age is appreciably better than in the country as a whole.

	Under 1 year.	1	2-4	5-14	15 & over	Total
Primary	48	5	2	9	3	67
Re-vaccination	Pins	prof.	1	5	3	9
						76

POLIO VACCINATION.

Polio vaccination was offered to children born in the years 1947-54 inclusive. During this period 3163 births were registered in East Dereham and Mitford and Launditch Rural District. There were 1078 acceptances giving an acceptance rate of 31% approximately, a rate which compared favourably with the other districts of the County.

In an innovation of this nature it was not surprising to find that parents were unwilling to have the younger age children vaccinated. This is shown in the following table
Born in 1954 1953 1952 1951 1950 1949 1948 1947

12.3% 19.4% 20% 21.2% 42.3% 49.9% 52.5% 50.4%

The course had to be completed by the end of June 1956, and consisted of two injections for children born in selected months in selected years. 7 children received 1 injection and 109 children received 2 injections. No reaction of any importance was encountered.

SANITARY CIRCUMSTANCES OF THE AREA

WATER SUPPLY.

Of the five water samples sent to the County Public Health Laboratory for bacteriological examination by the Public Health Inspector, four were reported as being highly satisfactory and one unsatisfactory. The unsatisfactory report was on water from a shallow well which has been replaced by a supply from the town mains.

A survey is being made of all remaining wells in the Toftwood area to establish the suitability of the water for human consumption.

Total Yearly Consumption	64,969,000
Increase on previous year	3,002,000
Total Yearly Domestic Water Used	47,766,540
" Industrial or Metered Supplies	17,202,460
Average Daily Consumption	178,000
" Gallons per head per day	20.7
used by industry per day	47,132
Estimated Total Population supplied	6,315
" not supplied	345 or 5%
Number of houses supplied with Town Water :-	
(a) Direct to houses	1,318
(b) By means of Stand Pipe	300
Total number of houses in Rural Area (no mains)	72
" Toftwood Area not on mains (but mains in existence)	36

These figures are all estimated on an average of 3.2 persone per house. Extensions to mains and work done.

New main extensions were carried out to three small building sites, at Swanton Road, Cecil Road and Swanton Avenue, none of which are complete.

88 properties and houses have been connected to the town supply.

Head Works.

No additional equipment or plant has been installed during the year. An urgent need is the additional filter mentioned last year owing to the peak demand which has risen to 16,000 gallons per hour. The present filters can only pass 12,000 g.p.h. The yearly consumption has risen 15% in the last 10 years.

Number of samples taken.

Bacteriological 11. Chemical 1.

Results in all cases were "Highly Satisfactory".

A copy of the chemical analysis will be found at the end of the report.

SEWAGE DISPOSAL.

Stage 1 of the reconstruction of the disposal works is nearing completion. Briefly it includes improvements to the design of the settlement tanks, increased filtration area, additional humus tanks and a digestion tank. Recirculation is also provided for which will ensure a reasonable standard of effluent being discharged into the stream.

After ten years of continuous resistance by various Ministerial Departments it is gratifying to note that the Toftwood Sewage Scheme has been commenced. I consider the Council and its officials are to be congratulated for their persistent and untiring efforts towards improving the public health facilities in the area which have been a source of concern to me for some time.

Test baiting of the main sewars shows no evidence of rat infestation.

CLOSET ACCOMMODATION.

In 1951 the Council decided to discontinue their various schemes for pail closet conversion throughout the town because the disposal works was unable to cope with the increased input. The enlargement of the works allows these schemes to be revived and I should like to see them put in hand without delay.

Night soil collection in the central and outlying parts of the district has been satisfactory and few complaints were received.

Towards the end of the year the Council considered a report on the emptying of septic tanks, particularly in relation to the Toftwood area and it was decided they should be emptied twice per year free of charge.

PUBLIC CLEANSING:

Domestic refuse is collected weekly in the built up area of the town and elsewhere monthly.

The amount of refuse collected is continuously on the increase and requests by the Council to householders to reduce their refuse by burning their paper and cardboard boxes had little effect. If the increase continues it appears a larger vehicle will be necessary.

There were no complaints of fly or smell nuisance from the refuse tip during the year and only one small surface fire was reported.

Routine street scavenging has been maintained satisfactorily.

SANITARY INSPECTION OF THE AREA.

The following table summarises the inspections made during the year:

Description	Inspections	Informal Notices	Statutory Notices.
	осим ситемици, в работовой возунаросного обос в награ и наворум парадник част работ по тра	r sjedenseger i fransk piper skrivet op et skullende i me genden en best tredten flete de gelet i fatterelijke flete flet	en trappens compared per color, applicamentaments entrapped entrapped to compared by per color delivery compared to
Drainage	326	2	3008
Factories, workshops & bakehouses	66	1 ,	(ma)
Slaughterhouses & butchers shops	322	1	944
Food shops	51	-	- ·
Cowsheds, dairies, etc.	8		
Restaurants & hotels	30	-	-
Verminous & filthy premises	-	~	
Housing	117	12	24
Nuisances	51	pun	
Infectious Diseases	eneg	-	p=16
Rats & mice	48	bose	greek v
Refuse collection	12	37	para.
Nightsoil	3	p=0	Shelp
Water Supply	10	1	2040

54 informal notices served during the year.

Camping Sites.

There are no camping sites in the district.

SMOKE NUISANCES:

A factory refuse tip which had been causing a smoke nuisance to residents in the area has been closed. The same area is also affected by smoke from a laundry and though the firm are prepared to install an oil fuel plant, it appears they are having difficulty in obtaining approval from the Ministry of Fuel and Power due to the oil shortage.

DISINFESTATION AND DISINFECTION.

Two houses were fumigated and two lots of bedding were steam disinfested. No cases of bed bugs or fleas were reported.

HOUSING.

Twentythree houses were closed during the year under the Council's slum clearance programme which brings the total number of houses subject to closing orders in the district to thirtynine.

I would suggest this is a sufficient number of houses with which to commence the formulation of clearance areas and if the Council are to demolish the 161 houses already agreed before 1960 it seems essential that actual demolition works should proceed without delay.

Two improvement grants were approved during the year.

INSPECTION AND SUPERVISION OF FOOD.

MILK SUPPLY.

Three dealer's licences were issued authorising the use of the special designation "Tuberculin Tested" in accordance with the Milk (Special Designation) (Raw Milk) Regulations, 1949

Four dealor's licences were issued authorising the use of the special designation "Pasteurised" in accordance with the Milk (Spacial Designation) (Pasteurised and Sterilised Milk) Regulations, 1949.

The dairies were inspected and found to be satisfactory.

No cases required to be dealt with under part Vll of the Milk and Dairies Regulations, 1949.

ICE CREAM-

Twelve ice cream samples examined were Grade 1.

FOOD CONDEMNED.

A complaint of mould on bread was examined by the Public Health Laboratories. The bread was found to be satisfactory.

Food premises were inspected under the Food Hygiene Regulations and alterations and improvements necessary for compliance with the regulations are under consideration.

Twenty condemnation certificates were issued during the year covering:

- 86 tins
- 359 lbs. haricot beans
- 12 lbs. pork sausages
- 80 lbs. imported beef (affected with bone taint)
- 30 lbs. imported ox liver (docomposed)

MEAT INSPECTION.

Meat is inspected at the slaughter house every day of the week with the exception of Thursday. The standard of meat produced remains high but conditions under which it is accomplished leaves much to be desired.

Certain minor improvements have been carried out at the slaughter house and a licence is to be issued for a further year. Alternatives to the propent arrangements are under consideration by the Council.

The following animals were slaughtered during the year :-

THO TOTTOWELLS WILLIAM TO WOLO D.	100100	aar rrie	ono your	
	Cattle	Calves	Sheep & Lambs	Pigs
	592	5	538	1128
CARCASES INSPECT	red and co	NDEMNED		
	Cattle	Calves	Sheep & Lambs	Pigs
Inspected	592	5	538	1128
TUBERCULOSIS ONLY				
Whole carcases condemned Carcases in which some organ	-	-	DMs	PIS
or part condemned Percentage of numbers inspected	28	prog.	eurit	~
affected with tuberculosis	4.56%	Agent Mag Halve (SM Paleot Rig Sala No Halve (SM No Halve	пауу пійінті іптанта пинтійт такта пинтій такта піта	ampara dan mas sakala dikapanakka papundana - 1817 mag
ALL DISEASES EXCEPT TUBERCULOSIS				,
Whole carcases condemned	-	goog	1	. 1
Carcases in which some organ or part condemned Percentage of number inspected	20	you	Date -	7
affected with diseases other than tuberculosis	3.38%	==	.18%	. 70%

FACTORIES ACTS, 1937 and 1948

Part 1 of the Act

1. Inspection for purposes of provisions as to health.

	Number on Register	Inspections	Number of written notices	Occupiers
Factories in which Sections 1,2,3,4, and 6 are to be enforced by the Local Authoria	ty. 5	5	100	prod.
Factories not included in (i) in which section 7 is enforced by the Local Authoria	ty. 46	48	~	p=4
Other premises in which section 7 is enforced by the Works Site Local Authority	4	15	se-et	Bong
Total		6.8		in the second contraction of the second contract of the second contr

2. Cases in which Defects wore found.

	Found	Remedied	Refer: to H.M b: Inspector	H. M	No of cases in which prosecutions instituted
Want of cleanliness	646		Olare)	Форт	phosp
Overcrowding	best	940	Managa	956	-
Unreasonable tomperature	done	***	**	prose	ann
Inadequate ventilation	g-ray	great .	200	-	prog.
Ineffective drainage of	floors -	áres.	desc)	WANG.	juda
Sanitary Conveniences: (a) Insufficient	pro.	· pas	ma	1946	ema .
(b) Unsuitable or					
defective	amb	1	~	prod	~
(c) Not separate for					
sexes	p=4	pross	gains	946	246
Other offences against the	he Act -	devil	per	\$40H	eng
	contribute and, such contribute as a contribut		доми и Итилия и тэрин ургаацияния день ор даху цейн так при и выходи од	nga makapatan atau mini majah Maharagani pada mini mili meni interami andi pada menjad	megar na maga galasana usiri kilabar usari 1980-nadagay umaga perdekitap sahagi na ga masian 19
	" to phil a stage of the stage	allin Viso satt nær neder et ny a artislegg Maddanne planske allege et det gest held fall hærende papen det	r kan sinn jister tir lodus og til ningett eld dødt figlil er ån kri slåndhud til forskålde om løglagde tjeldryge conserve sy sid	gift Tridicated Al Endorso og Skottendag Y 388gad cotyggerinda er ndar giftig þát længift í eiligfilga frikk eðalderni og sk	ng kalan agab agagakan mara kabagas atkadabat ingdan atkada nagaginga malakanikasi dalahanikanikan ingdana qi r-1410

No prosecutions were instituted under the Acts.

During the year your Medical Officer of Health again carried out the duties of Appointed Factory Doctor and 171 juveniles were examined for fitness for employment. In addition two employees were examined at approximately fortnightly intervals as required under special regulations for individuals employed in dangerous trades (chronium plating)

HOUSING.

The number of houses erected in 1956 was

1)	Ву	the	Cour	ncil	26
2)	Ву	priv	rate	enterprise	19

The number of houses built by the Council is pre-war 144, post-war 393. It is regretted that the last Annual Report showed the number of post-war Council Houses to be 508 - this should have read 367.

The number of applicants on the housing list at 31st. December, 1956, was 214, 90 less than a year ago.

HOUSING CENSUS.

A census of 357 Council Houses was made in November, 1956. Of the tenants, 48 had married members of their family living with them and 15 had lodgers.

928 adults and 589 children were living in these houses, giving an average of 2.6 adults and 1.65 children per house.

Northgate.	a bresp	38 houses Average	Adults 134. 3.5	Children 48.
Jubilee Avenue	100	26 houses Average	7 5 2.9	32
Becclesgate	200	47 houses Average	123 2.6	80 1.7

The number of people occupying the houses was :

Persons.		No. of houses.	Persons.	No. of houses.
1	F +	4	7	21
2		33	8	9
3		97	9	3
4		98	10	3
5		,50	11	2
6		34	12	1

NATIONAL HEALTH SERVICE ACT, 1946. Local Health Services under Part 111.

Domestic Help Service.

41 occasional home helps were employed during the year, and 19 cases were assisted in East Dereham.

Mental Health - Administration.

Mr. A. Boothman, Welfare Officer, remained in charge.

18 patients were admitted to mental hospitals, 13 of these being voluntary and 5 certified.

Mental Defectives.

The following cases were visited and reported on periodically :-

Under statutory supervision - 7 (2 visited by P.S.W.)

Under friendly supervision - 4

On licence - 1

Guardianship - Nil'

Home teaching - 2

Two children attend the fortnightly Occupation Centre at the Local Health Office, and two children receive training at home.

Old People's Clubs.

Two Old People's Clubs continue to function in the area with a combined membership of about 200.

Infant Welfare Centre.

This centre continues to be held twice a month and attendances have been satisfactory.

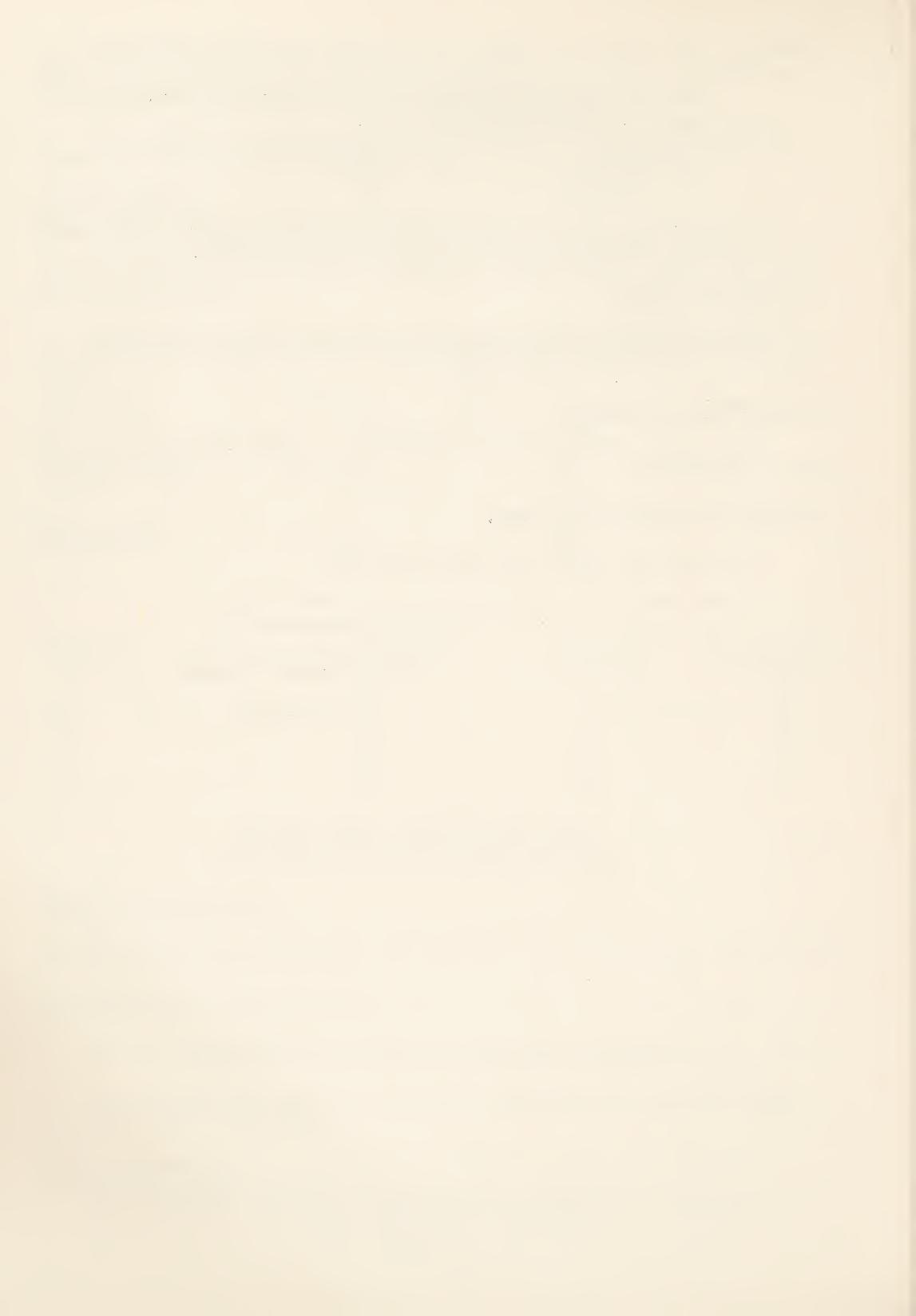
National Assistance Act, 1948.

No cases were dealt with under this Act.

I have the honour to be,

Your obedient Servant,

A.B. Guild.



Lincolne Sutton & Wood, Clarence House, 6, Clarence Road, Norwich.

25th March, 1957.

Cert. No. 1106H

Lab. No. 4895/W

CERTIFICATE OF ANALYSIS OF WATER.

Sample Received 11th. March 1957 from East Dercham U.D.C. Marked From Town Supply via Tap in Waterworks Grounds. Appearance when received - clear.

Nature of Deposit - nil

Colour - nil.

Odour - nil.

Reaction - faintly alkaline. pH - 7.6 Taste - satisfactory.

Results of Chemical Analysis in Parts Per Million.

Ammoniacal nitrogen	0.01	Hardness as CaCO 3:
Albuminoid nitrogen	0.06	Total 260
Nitrate nitrogen	Nil	Carbonate (Temporary 235
Nitrite nitrogen	Nil	Non-carbonate (Permanent 25
Chlorine as chlorides	26	Alkalinity as CaCO ₃ 235
Oxygen absorbed (4 hr. 27°C)	exygen absorbed (4 hr. 27°C) 0.30	
Fluorine.	0.85.	Free carbon dioxide 22.5 Total solids (at 180°C) 300
		Iron (total) 0.05
		Metals in solution, other than iron - nil

OPINION.

This water is of good organic quality and the chemical analysis as a whole shows no sign of pollution. Little alteration has taken place in the analytical characteristics of this water since it was analysed in Fobruary 1955 (our Cert. No. 936F); the salinity is slightly higher and the iron content is practically negligible on this occasion. The reaction of the water is on the alkaline side of neutrality, as is desirable in the public supply, to avoid corrosive action on metals. The odour, taste and appearance of the water were all satisfactory and in our opinion it is suitable for drinking and general purposes.

The fluorine content has been determined, for the first time on this water according to our records, and is of considerable interest in as much as it is markedly higher than than of the great majority of waters used for drinking purposes in Norfolk, most of which contain less than 0.2 p.p.m. of fluorine. The higher figure in the sample is a definite advantage; the optimum fluorine content of a drinking water is usually taken as 1 p.p.m.

(signed) Lincolne, Sutton & Wood



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